Waste Discharge Requirements Program
PROGRAM REPORT

Overview
The Waste Discharge Requirements (WDR) Program regulates all point source discharges of waste to land that do not require full containment (which falls under the Land Discharge Program), do not involve confined animal facilities, and involve no discharge of a pollutant to a surface water of the United States (which falls under the NPDES Program), but does include discharges to surface waters not subject to the NPDES Program. Each point of potential release of waste constituents, whether a feature for waste storage, treatment, disposal, or recycling, must be evaluated separately to determine under what program it must be regulated. Waste discharge requirements adopted under the WDR Program protect surface water by either proscribing discharge of a pollutant to waters of the U.S. or prescribing requirements for discharge to surface waters not waters of the U.S., and they protect groundwater by prescribing waste containment, treatment, and control requirements. Over 1200 discharges in this Region are regulated by orders adopted under the WDR Program.

Laws
A person discharging waste or proposing to discharge waste (other than into a community sewer system) that could affect the quality of waters of the State must file a report of waste discharge. Filing of a report of waste discharge requires a fee, standard forms, and supporting technical information. The Water Code allows up to 140 days to adopt waste discharge requirements for discharge once a filed report of waste discharge has been determined complete, and more time when CEQA documents must be prepared. The Water Code requires that all possible steps be undertaken to encourage water recycling and any person who proposes to produce or use recycled water must file a report and obtain water reclamation requirements or a master reclamation permit.

Each waste discharge requirements order contains conditions intended to ensure the discharge conforms to the Water Code. Multiple factors must be considered in determining reasonable conditions of discharge and the quality that should be maintained in groundwater, including the relevant water quality control plans and water quality objectives. Where a group of discharges are similar, use similar treatment, and occur under similar conditions, a general order containing waste discharge requirements for everyone within the group can be adopted. Compliance with requirements is monitored under authority to conduct investigations and require technical and monitoring reports.

Waste classification determines whether a waste discharge to land must be regulated under the WDR Program or Land Disposal Program (except for sewage, fertilizer, and radioactive material, which are always regulated under the WDR Program). Title 27, California Code of Regulations, section 20005, et seq., contains the regulations that establish the waste classification system. If any constituent in or derived from a waste requires that it be classified as designated waste, the waste must be fully contained unless it qualifies for exemption and regulation of the discharge falls under the Land Disposal Program. If a waste is not subject to Title 27, regulation of the discharge falls under the WDR Program.

Any authorization to discharge is a revocable privilege, use of waste assimilative capacity of groundwater can be limited, and waste discharge requirements may be reviewed and revised at any time. Orders containing discharge requirements have review periods of five, ten, and fifteen years to ensure they are effective in precluding unauthorized water degradation and nuisance, and waivers must be reviewed at least every five years and require renewal.

Laws governing the WDR Program include statewide plans and policies of the State Water Resources Control Board (State Water Board) and Regional Board plans and policies. The plans and policies of the State Water Board applied most frequently in the WDR Program are the "Antidegradation" Policy; the "Reclamation" Policy; the "Cleanup and Abatement" Policy; and the "Water Quality Enforcement Policy." The policies of the Central Valley Water Board are set forth in the *Water Quality Control Plan for the Tulare Lake Basin, Second Edition;* and the *Water Quality Control Plan for the Sacramento River and San Joaquin River Basins, Fourth Edition.*

Discharges Regulated Under the WDR Program
Sources: WDR Program discharges are the most diverse of the three core regulatory programs and include:

- Discharge of sewage from municipal treatment plants, private utility treatment plants, small private treatment plants and larger septic tank/ leachfield systems serving commercial, industrial, and residential developments.
- Production of recycled water from municipal sewage and the distribution and use of recycled water by various types of users.

- Treatment and discharge of domestic sewage sludge and biosolids.
- Discharge of processing wastewater from sand and gravel and other mining operations not involving navigable surface water and not subject to Title 27.
- Discharge of industrial wastewater from power plants, oilfield production, etc.
- Discharge of wastewater, waste residuals, treated sludge, and recycled water from food processing plants and operations (packing, cooling, peeling, dicing, fermenting, brining, canning, etc.) for milk, cheese, tomatoes, olives, wine, and many other fruits and vegetables, etc.
- Discharge of wastes from minor surface water dredging projects and all discharges in addition to dredging that occur to surface waters not waters of the United States.
- Discharge of wastes from water supply treatment plants.
- Discharge of treated water supplies for aquifer storage and recovery projects, and similar disposition of untreated water supplies and storm water used for groundwater replenishment and as water banking projects.
- Discharge of treated groundwater from remedial actions at leaking underground tank and other spill sites.

Irrigated Lands. As discharges of runoff from irrigated lands are exempt from the NPDES Program, they are subject to WDR Program requirements. In 2002, a separate Irrigated Lands Program was created with funding taken from the WDR Program. In Fall 2005, some of these positions were restored to the WDR Program but continue to work on irrigated land discharges.

Discharge Methods. Incidental release occurs from collection systems, sumps, treatment units, and surface impoundments (evaporation ponds) of varying construction and integrity, and from surface applications and impoundments of recycled water. Intentional discharge occurs from disposal ponds, seepage pits, leachfields, from spreading or spraying onto the land surface, and direct injection into groundwater.

Means of Regulation

Individual WDR. Individual waste discharge requirements orders for specific projects are the most common means of regulation due to the many variables and factors that must be considered in establishing conditions of discharge and ensuring accountability.

General Orders. Similar treatment and discharge conditions have allowed development and use of several general orders. General orders currently available or soon to be available in this program are for:

- Discharges to Land by Small Domestic Wastewater Treatment Systems, State Water Board Order No. 97-10-DWQ
- Discharge of Biosolids to Land for Use as a Soil Amendment in Agricultural, Silvacultural, Horticultural, and Land Reclamation Activities, State Water Board Order No. 2004-012-DWQ.
- Dredged or Fill Discharges to Waters Deemed by the U.S. Army Corps of Engineers to be Outside Federal Jurisdiction, State Water Board Order No. 2004-0004-DWQ.
- Dredged or Fill Discharges, State Water Board Order No. 2003-0017-DWQ.
- Discharges to Land with a Low Threat to Water Quality, State Water Board Order No. 2003-0003-DWQ
- Sewer Collection System Agencies, State Water Board (pending)
- Discharge of Groundwater or Surface Water from Cleanup of Petroleum Pollution, Order No. R5-2003-0044.

Water Reclamation (or Recycling) Requirements and Master Reclamation Permits. Water recycling requirements are determined by the DHS as necessary for the public health, safety, or welfare and, if a project will not affect water quality, are imposed through a water reclamation requirements order. Master Reclamation Permits allow the permit holder to control recycling by individual users, and they contain waste discharge requirements as necessary to implement effluent limitations and other requirements for protection of groundwater.

Standard Conditions. Many discharge requirements are applicable to to major groups of dischargers and rarely change. As established standards, these are listed separately in a document incorporated by reference into each adopted order.

Individual Waivers. An individual waiver of waste discharge requirements can be adopted if appropriate.

_____. General waivers apply to categories of waste discharges. In some cases they waive submittal of a report of waste discharge and in other cases they allow staff to administratively determine, based on the filed report of waste discharge, whether a specific discharge meets the conditions for waiver of waste discharge requirements previously established by the Central Valley Water Board. General waivers currently in effect for this program are:

- Pesticide Applicators and Retail Fertilizer Facilities, Resolution No. R5-2002-0147
- Various Minor Discharges, Resolution No. R5-2003-0008 (e.g., air conditioner, cooling, and elevated temperature waters; drilling muds; Inert solid wastes; swimming pool discharges; agricultural commodity wastes).
- Small Food Processors, Including Wineries, Resolution R5-2003-0107

General waivers can also be granted to individual dischargers based upon regulatory oversight by a local public entity that administers a program at least as stringent as the Central Valley Water Board's. Historically, this has included waiver of reports of waste discharge and waste discharge requirements for individual sewage disposal systems for persons in all counties, and for land application of biosolids and of food processing solids residuals in certain cities and counties. General waivers of this nature include biosolids projects under oversight of Merced County (expired and pending renewal) and land application of food processing waste solids under oversight of Stanislaus County (currently pending).

Funding and Staffing

Annual fees provide all the funding allocated to the WDR Program. The Region received a $3.28 million budget to start FY 2005-2006, which supports the equivalent of 24.3 staff. For perspective, over 116 staff would be necessary to sustain an effective WDR Program within the Central Valley.[1]

From 1999 to 2001, the WDR Program received a short-term resource supplement to process backlogged waste discharge requirements. In 2002, the WDR Program was reduced to pre-supplement funding levels, and some lost positions were shifted into the newly created Irrigated Lands Program. The position reduction created an unequal workload among the technical staff remaining. Work of Stanislaus and Tuolumne Counties and Musco Family Olive Company was shifted to the Fresno office, and work of Glenn County was shifted to the Redding Office. This FY, attrition created work imbalances again and an opportunity to shift cases back to the Sacramento Office, but the shifts remain pending due to protracted delays in filling vacant positions. In December, a supplement increased the budget sufficient to support 29.8 staff but the increase is misleading as it supports continuing work in the Irrigated Lands Program. Current distribution of program personnel funds is shown below:

Line	Staff	Sacramento	Fresno	Redding	Total
1	Total number of staff using program funds	39	29	12	80
2	Total number of staff charging > 3 months to WDR Program	19	13	7	39
3	Technical staff in Line 2 that are Supervisory (in PYs)	3.3	2.7	.8	6.8
4	PYs in Line 2 allocated to Line technical staff	10.7	7.7	2.3	20.5
5	PYs in Line 4 where positions are vacant	2.5	3	1	6.5
6	PYs in Line 4 doing Irrigated Lands work	4.8	0	0	4.8

Issues

Consistency – Implementation of the basin plans for all waste releases to land has not always been consistent, particularly with respect to application of the Antidegradation Policy and Title 27 Regulations. Similar waste discharged under similar circumstances should be subject to similar waste discharge requirements fully consistent with the basin plans. Staff has been working over the past several years to improve consistency among the offices and programs in application of policy, strategy, documents, and goals. The manager and seniors of the WDR Program regularly participate in meetings of the Region's Consistency Program, the statewide WDR Program roundtable, and internal program and enforcement roundtables. The program manager and assigned attorney receive a copy of all draft WDR and enforcement orders for review, and management and legal both must approve tentative orders prior to Regional Board consideration. Improvements have been necessary to ensure consistency with respect to waste classification, Title 27 exemption, containment requirements, adequate liner designs, effective land treatment, and evaluation of impacts on soil and groundwater, and changes have been incorrectly perceived by many dischargers to be new regulatory requirements.

[1] The estimate is based upon 1999 workload standards that lack any estimate for: CEQA reviews, new responsibilities added by law since then for waivers, work related to or resultant from the AB885 requirement for statewide regulations for septic tank systems, and review of technical reports.

Staffing – The WDR Program supports in part 80 staff, but just 39 of them work in it more than three months a year. Funding currently supports 29.8 equivalent full-time positions. Staff-equivalents assigned budget for technical work total 27.3 PYs (2.5 PYs are for administration and support personnel). Of these, 15.7 PYs are line technical staff (exclusive of supervisory staff and line technical staff assigned to irrigated lands), which causes on average each person to manage a caseload of 76 sites. As 8.6 PYs must be expended performing nondiscretionary tasks, such as caseload management (e.g., investigating complaints and responding to discharger requests for regulatory advice or actions, etc.) and data entry, less than one-half the resources are actually available to produce measured work results (e.g., staff inspections, informal and formal enforcement actions; updated or new WDRs, etc.). 6.5 PYs of these line technical staff positions are currently vacant, and have been for months.

The State Water Board's "Compliance Assurance and Enforcement Strategy" of 1998 indicated that this Region's WDR Program received only 60% of the statewide average funding per regulated WDR site. Similarly, the report showed that the WDR Program received 38% and 25% of what the NPDES and Land Disposal Programs in this Region received per site. The NPDES Program subsequently received a resource supplement that continues essentially intact and has been supplemented with contracted help. The caseload is one factor that contributes to the difficulty of retaining staff in the WDR Program.

Backlogged Applications and WDR Updates – The WDR update backlog was the original reason for a short-term program resource supplement that occurred from 1999 through 2001. With an update backlog of 320 orders in 1999 and additional updates coming due in succeeding years, it would have taken an annual renewal rate of 125 orders (18.3 PYs) over six years to eliminate the backlog by now, and an update rate of 105 orders (15.3 PYs) annually to maintain a zero backlog thereafter. Thus, the two-year supplement of 11 PYs temporarily slowed but did not reduce the increasing backlog, which has continued to increase. Only 1.9 PYs are allocated this FY to address backlogs.

Self-Monitoring Reports – The primary means of Regional Board staff, as well as dischargers, to monitor compliance with waste discharge requirements is through review of self-monitoring reports. Unfortunately, some dischargers do not submit the required information, or they submit the required information erratically or only when specifically reminded. The reports typically receive only cursory review by staff until a site inspection occurs. The 2.4 PYs allocated this FY are considerably less than the 18.1 PYs that would be required to perform the effective level of review described by procedures. Hence, this regulatory tool is ineffective and adversely affects other program areas.

Inspections – Validation of conditions described by self-monitoring data must be done through periodic inspection, and inspection is the only means to evaluate system maintenance and observe unreported activities. Adhering to the inspection schedule identified as the minimum necessary to be effective by the State Water Board would require 19.1 PYs. The FY allocation for this program component is 2.5 PYs. Lack of inspection capability adversely affects other program areas.

Enforcement – The Enforcement Policy emphasizes timely, fair, firm, and consistent enforcement as critical to the success of water quality programs. However, formal enforcement inevitably requires diversion of resources from other program functions already operating at subsistence levels. As illustrated by the recent enforcement action against Hilmar Cheese Company, enforcement action against contentious dischargers can consume significant program resources. Even with enforcement a priority, 0.7 and 2.9 PYs are allocated for informal and formal enforcement, respectively, this FY. This is 10% of the resources the State Water Board projected as necessary to sustain effective enforcement in the Region's WDR Program.

Land Treatment Systems – Historically adopted waste discharge requirements allow application of untreated or partially treated food processing or winery waste onto land for additional treatment and for "reuse" benefits, typically as proposed in a waste management plan. These land treatment systems have historically been tacitly and informally exempted from waste classification that would place them under Title 27. A major assumption supporting the historic waste discharge requirements for land treatment systems, and the Title 27 exemption, was that residual waste constituents were effectively attenuated within the soil column before reaching groundwater. Title 27 requires a site-specific pilot demonstration as a prerequisite for each land treatment site to develop design and operating parameters that protect groundwater, but nothing comparable has been required of agricultural waste applied to land though it usually will qualify as designated waste. Monitoring data and inspections indicate that few dischargers have adhered to the proposed waste management plans and many have either significantly degraded or polluted groundwater. The attenuation process itself is not scientifically documented or adequately monitored for process control. Since staff's initial report in March 2000 about groundwater problems caused by the land treatment of winery and food processing waste, both the California League of Food Processors (CLFP) and Wine Institute have worked toward documenting sound design and operating criteria for land treatment to provide to their members. This has meant additional staff workload for meetings, participation in conferences, and technical

reviews not associated with specific discharges. The Wine Institute has thus far developed incomplete hypotheses regarding the science and controlling parameters of land treatment (that failed a formal peer review) and only in 2005 did it begin to specifically address control of inorganic salts. CLFP revised its manual of good practice and in 2005 committed to address remaining deficiencies in the revised manual, and began that revision process just recently. Because of lack of a scientifically sound design, historical regulatory practices, inadequate monitoring, historically poor operational control, discharger contentiousness, no required pilot demonstration, and political factors, regulation of land treatment in the WDR Program is not reliable or effective and several polluted sites exist. No remediation is occurring at most these sites, but this will be the expectation as sites are addressed by staff. Compared to regulation by effluent limitations, land treatment systems are high risk and consume disproportionately high resources.

Monitoring – During review of the effectiveness of older orders, it became evident that historical monitoring, particularly of groundwater, has not been sufficient for early detection of degradation and prevention of pollution. Deficiencies include inadequate monitoring well construction and networks, and inadequate monitoring with respect to frequency and monitored constituents. These monitoring deficiencies have been addressed as encountered by staff. Inconsistencies of older monitoring and expense of recent monitoring have been the basis of criticism. Similar monitoring under similar circumstances, and monitoring sufficient to address all appropriate constituents of potential concern is our objective and staff is working toward consistency in this area.

Best practicable treatment or control (BPTC) – No defined procedures exist to ensure thorough and objective evaluation of what alternative treatment technologies and control methods can be considered the "best efforts" intended by the Antidegradation Policy. No statewide or regional guidance exists to instruct staff and direct a discharger on what demonstration must be made for a selected treatment or control alternative to qualify as the best efforts. Economic feasibility tends to receive disproportionate weight in discharger arguments when in actuality it is but one factor of many that must be weighed and balanced by the Regional Board. Guidelines and procedures on determining what constitutes BPTC, and appropriate perspective on economics, would improve efficiency of staff in permitting and ensure effectiveness of requirements in minimizing degradation and protecting groundwater.[2] Work is currently underway by several major Tulare Lake Basin municipal dischargers (e.g., Cities of Fresno, Porterville, Bakersfield, Hanford, etc.) to perform comprehensive BPTC evaluations of their waste source control, and wastewater collection, treatment and disposal systems. Once complete, these evaluations will ensure all reasonable and effective municipal wastewater treatment technologies and control methods are implemented and that the highest water quality attainable by reasonable measures is maintained. Historically, few private entities have been required to make a similar study and demonstration, but this will be the expectation as sites are addressed.

Treatment and Disposal Capacity – Strategies in the 1970s included generous federal and state financial assistance in upgrading, expanding, and consolidating public wastewater treatment and disposal systems for the purpose of achieving performance standards and meeting water quality objectives. Since then, Title 23 has specified that public facilities begin planning for additional capacity at least four years in advance of when it will be needed and then either insure the capacity is in place before needed or restrict growth until the expansion is in place. Standard requirements applied to all dischargers also specify a duty to: perform proper operation and maintenance, halt or reduce any activity as necessary to maintain compliance with waste discharge requirements, notify the Regional Board of noncompliance problems, take all reasonable steps to assess and minimize impacts that result from noncompliance, and accept consequences if violations are caused from a failure to do so. Another standard requirement states that any material change must be preceded by a report of waste discharge. Too many dischargers ignore these performance expectations.

Indirect Dischargers – Over the last several years, categorical and significant industries have relocated from large cities in other regions to small communities in the Central Valley. Although a standard provision for years has identified addition of a significant indirect discharger as a material change that must be reported and result in re-evaluation of terms of discharge, this circumstance is rarely reported. Consequently, the controls by the small community are typically inadequate, and the WDR orders and their monitoring and reporting requirements are inadequate to effectively regulate the altered character of waste. USEPA has taken enforcement against a couple of these indirect dischargers.

Consolidation – The "State Policy for Water Quality Control" requires consolidation of wastewater collection and treatment facilities where feasible and desirable to implement sound water quality management programs. In general, consolidation provides capital and operational savings, increased reliability, and opportunities for recycling that are otherwise not feasible.

[2] For example, the State of Washington developed a Permit Writer's Manual that instructs technical staff on how to evaluate and implement it's "BPTC. "

Growth in the Region has created an increasing number of large development projects that propose separate community systems, including projects near existing municipal sewage collection systems. New projects must be consistent with this principle.

Septic Systems – Regulation of discharges from residential septic tank-leachfield systems was conditionally waived (informally and formally) to the 38 counties within this Region in the 1970s with the expectation that they implement criteria at least as stringent as that in the basin plans. In the years since some counties have deviated from the basin plan minimums. In addition, the formal waiver expired and renewal has been postponed pending the expected promulgation of statewide regulations in response to AB885. The regulations are still pending. In the meantime considerable rural residential development reliant on septic tank-leachfield systems is occurring throughout the Region.

Groundwater Quality – When evaluating whether a discharge has caused or will cause groundwater degradation, the point of reference is 1968, the year the Antidegradation Policy went into effect. Data from this era is limited and general, but good enough for a reasonable perspective of baseline quality and essential to consider in correct application of policies. Discharge requirements must protect the highest quality groundwater that will be in hydraulic continuity with the discharge. Both must be factored into future analyses of appropriate waste discharge requirements, which will continue to consider more recent and site-specific data and subsequent influences on groundwater quality.

Discharge Points – Historically regulation has focused on only the declared and obvious discharges, such as a pond or land disposal area. Each point of potential release (sumps, tanks, storage ponds, etc.) and intended release (percolation pond, disposal area) must be evaluated for consistency with policies.

Science and engineering – Historically, authorization for discharge has been based upon poor data for many aspects of a waste discharge, particularly for land discharge of non-domestic waste. The scientific and engineered rigor of project analysis must increase. Each waste constituent that is released or may be released must be evaluated for its potential to degrade or pollute groundwater and then subjected to rigorous analysis as to variability and technically feasible methods of treatment and control to minimize the degradation. If treatment and control is not sufficient to ensure resultant degradation of groundwater will be acceptable, the constituent must be fully contained or it must be scientifically demonstrated that the constituent will be attenuated within the upper zone of the soil profile. Concentrations that must be achieved at the point of release to ensure achievement of the predicted result must be quantified. Documentation of the baseline and extant condition of groundwater and the engineered design of the project must be provided by the discharger.

Uncontrollable Factors – Authorization to discharge a waste constituent to groundwater that already exceeds a water quality objective for the constituent is acceptable in just three situations. It may occur where no designated beneficial uses are involved and thus no objective applies. It may occur if the exceedance results from controllable factors if the discharge will not contribute to the exceedance. And, it may occur if the exceedance results from "uncontrollable factors," and the discharge will not make the existing quality worse. Uncontrollable factors are factors not influenced by human activities. The Central Valley has many areas where shallow groundwater exceeds one or more water quality objectives due to human activities, beneficial uses remain designated, and adopted orders are based upon no degradation of the degraded quality. Instead, it should be determined whether control of all factors could restore the aquifer, a less stringent water quality objective may be reasonable, or de-designation of the impacted beneficial use is appropriate.

Salt – Inorganic salt is the single greatest pollutant group affecting the San Joaquin River and Tulare Lake Basins and it adversely affects both surface water and groundwater. Both basins are accumulating salt from importation of materials containing salt and from importation of vast quantities of surface water that contain salt. The salt issue affects numerous and varied stakeholders and multiple programs and agencies. An overview of the broader salt issue was described in a 2005 Regional Board status report and will be the subject of a State Water Board workshop in January 2006. Point sources of salt contribute to the broader salt issue, but reasonable controls have been defined by a regulatory framework reliant on waste classification and on technology and controls to preclude degradation of groundwater quality beyond (or to require its restoration to) the highest quality that can reasonably be maintained or restored that does not exceed water quality objectives. Some domestic and non-domestic waste discharges are currently inconsistent with the framework.

Blending – Historically some projects have been approved that blend wastewater with freshwater to the point that a crop can be successfully grown with the blend, with little analysis of whether the waste could or should be classified and contained, whether waste constituent concentrations could and should first be reduced with BPTC, and whether the consequential affect on groundwater quality (accounting for application methods, evaporative effects, and leaching factors) is acceptable. Use of freshwater for dilution of waste is both wasteful and unreasonable if for the purpose of avoiding feasible waste treatment and control methods and where it results in impacts inconsistent with other water quality policies.

Water treatment wastes – The quality of available water in some geographical areas requires removal of certain constituents to be potable, such as radioactivity, nitrates, inorganic salts, and arsenic. This occurs for both community water supplies and individual water supplies, and the most common treatment method is reverse osmosis, which creates a reject with concentrated amounts of the waste constituent and other constituents. The reject of RO is designated waste and thus expensive to dispose of properly. Other treatment methods generate similar wastes. Nothing is being done to control this at the individual level, and at the community level the common proposals are to return the reject to groundwater by means of the community sewage and/or by blending it with an irrigation supply where the relative volumes ensure it does not significantly alter the chemical character of the irrigation supply. The former essentially returns the removed constituent to where it would be if not removed. The latter simply dilutes it. Both methods have supportive arguments, but all release constituents where they are already a problem and over the long term will exacerbate the condition. The rate of incidence is expected to increase as dwindling water supplies force users to tap poor quality groundwater to meet population needs.

Reclamation and water conservation – While policies are clear that recycling should be encouraged in water-short areas, historic encouragement has resulted in approval of non-municipal "reclamation" projects that have economically unsustainable yields and that are inconsistent with other applicable policies, particularly those concerning waste classification, degradation, and pollution. Encouragement of municipal reclamation projects has resulted in turning private land into public land and cultivation of new land, which may not extend the water supply, be of maximum public interest or cause least impact on water quality. Neither reclamation nor conservation justifies inconsistency with other water quality policies. Support of reclamation and conservation must be limited to projects that both extend the water supply and are consistent with water quality policies.

Soil Amendments – Benefit to soil is only realized from decomposable and nutritive waste constituents. Historically, approval of reuse of a waste has focused too much on potentially beneficial constituents and ignored the potentially harmful, and typically more mobile, waste constituents. Waste classifiable as designated waste due to non-decomposable, non-nutritive waste constituents does not qualify for exemption from Title 27 despite the soil benefits and should not be authorized as a soil amendment. Similarly, the benefits to soil from any non-designated waste must be balanced against the adverse affects caused by non-beneficial waste constituents consistent with the Antidegradation Policy.

Indirect reclamation – Three recent project proposals include a system for extraction of groundwater beneath or near wastewater treatment facilities to control groundwater mounding and to take advantage of the natural filtration of the unsaturated soil column to meet Title 22 criteria for recycled water. Groundwater limitations implement the water quality objective for bacteria, but DHS does not consider the naturally filtered groundwater that meets bacterial limitations as suitable for unrestricted uses without disinfection due to other potential contaminants, such as viruses. DHS requires the extracted groundwater to be disinfected to Title 22 criteria. Thus, infiltration of un-disinfected, unfiltered wastewater in the view of DHS does not adequately protect the beneficial uses of domestic water supply and agricultural water supply. Well-established technology is defined in Title 22 for unrestricted use, and the sole benefit of the proposed projects over the established Title 22 technology is the cost savings from not providing filtration.

Priorities

Enforcement and consistency have been the two highest priorities the last three years. Applications, backlogged applications, WDR updates, complaints, self-monitoring report review, database maintenance, enforcement, public outreach, CEQA review, consistency, prioritization itself, etc., are all considered important and each requires subsistence level resources. As no area has resources significantly above the subsistence level to direct onto a priority activity, establishing any area as high priority for redirection of discretionary resources cannot have a dramatic effect on measured outputs in that area but can cause problems if the area from which resources are taken this area significantly falls below subsistence levels.

Performance

Performance typically meets or exceeds commitments made in work plans when compared in proportion to resources expended, but the mix of measured outputs usually varies from work plan projections as circumstances change during the year.